



Tomorrow's News

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The Tomorrow Project® — Albertans Studying the Connection Between Lifestyle and Cancer

Are You A New Participant?

In Fall 2004, more than 7,000 Albertans were recruited to *The Tomorrow Project*. If you are new to the project, welcome. We hope you enjoy *Tomorrow's News*, issued each February and August, which provides an update on project activities and study findings, as well as published research on cancer causes and prevention. Is there a topic you would like to see discussed? Please let us know!



Building a Laboratory

When the concept of *The Tomorrow Project* was first proposed in 1999, the vision of Alberta Cancer Board scientists was to build a "laboratory" of information, constructed with blocks of data provided over several decades by a dedicated group of Albertans from throughout the province. Cancer researchers now and in the future would have a unique and powerful set of information to examine trends related to cancer, lifestyle, and genetics.

That vision is turning into reality. After four years, nearly 18,000 participants have joined *The Tomorrow Project* and begun to lay the foundation. Spring 2004 saw construction of the next floor begin, with the

distribution of the first follow-up questionnaire, called **Survey 2004**, to over 11,000 participants. The information from this and future follow-up surveys will make *The Tomorrow Project* information a powerful resource for cancer research.

Obtaining information from the same people over time enables researchers to examine long-term trends in health and health-care practices, and to explore emerging issues such as the role lifetime weight patterns, alcohol consumption, sleep patterns, and use of female hormones play in the development of cancer and other chronic diseases.

Great Response to Survey 2004

We are delighted that so many people have taken the time to respond to **Survey 2004**, either on paper or online. To date, more than 80% of participants have returned their questionnaires.

In order to reach our goal, however, we need to hear back from as many people as possible. If you still have **Survey 2004** at home, or recently received a copy of **Survey 2004 Express**, please take a few minutes to complete and return it to us. It is not too late and every response counts!

Many of you may wonder why you did not receive **Survey 2004**. Participants have been recruited into *The Tomorrow Project* in ongoing phases, starting in 2000. **Survey 2004** was sent to all those who joined the study in or before 2002. (If you joined more recently, you will receive a follow-up survey in 2007.)

Think you might have misplaced your survey or are not sure when you joined? Just give us a call and we will be happy to check for you.

Physical Activ

What is the connection between physical activity and cancer?

Being physically active can help to reduce risk of developing certain cancers: there is convincing evidence that people who participate regularly in moderate-intensity physical activity have a lower risk of developing colon and breast cancers. It is also possible that risk of prostate and endometrial cancer might be decreased by physical activity, but as yet, the evidence for these decreases in risk isn't quite as strong as that for colon and breast cancer.

According to Health Canada, nearly two-thirds of Canadians don't do enough physical activity. This is not good news in terms of cancer prevention.

Why does physical activity help prevent some cancers?

We're not entirely sure, but experts have suggested several possibilities:

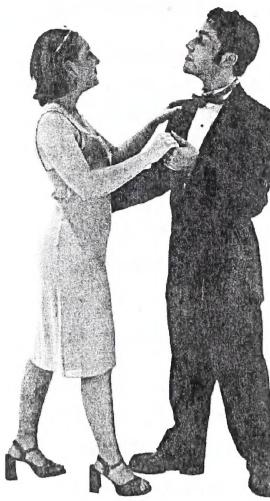
1. Regular participation in moderate physical activity can help to maintain a healthy body weight, which in turn plays a role in reducing cancer risk.
2. In the case of colon cancer, physical activity reduces the length of time that food waste stays in the body. It is thought that some potentially harmful substances are moved through the intestines more quickly when someone is physically active, so there is less opportunity for cancer to develop.
3. Another theory suggests that regular physical activity changes the production of hormones and other biological substances in the body. These changes may benefit the way that cells behave in the colon and breast, making tumours less likely to develop. Women who are physically active have lower estrogen levels and estrogen is related to the development of breast cancer.
4. People who take part in regular physical activity have lower rates of infection than people who are sedentary. Better immune system functioning might help to protect against cancer.

How much activity is needed?

Organizations like the World Health Organization, Health Canada, and the American Cancer Society suggest at least 30 minutes of moderate intensity physical activity each day on most days of the week. Others suggest that 45 minutes each day of moderate to vigorous activity might be even better in reducing the risk of colon cancer.

More research is needed to try to figure out the amount, type, and duration of physical activity that people need to do to reduce their cancer risk: studies like *The Tomorrow Project* will help answer those questions.

What type of activity is best?



Most experts agree that no activity is "better" than any other: the trick is to choose something that is enjoyable enough to keep doing on a regular basis over a long period of time. Moderate-intensity physical activity can be as simple as taking a brisk walk, going swimming, skating, doing yard work, or dancing.

While being physically active all one's lifetime is thought to be best for reducing cancer risk, many experts agree that it is never too late to start building physical activity into a daily routine.

Be realistic and keep safe!

For people who don't currently meet the guidelines for physical activity, it is important to start slowly and build up to meet the recommendations, so that the body can adjust gradually. Start with 10 minutes at a time and build up to 30 minutes or more of sustained activity. If you have been diagnosed with chronic illness, or are concerned about taking up a more physically active lifestyle, consult your doctor.

Physical Activity and Cancer

For more information about the links between cancer and physical activity and tips for getting active, you can visit these web sites:

Alberta Cancer Board
www.cancerboard.ab.ca/cancer/cancer_physical.html#benefits

National Cancer Institute
www.cancer.gov/newscenter/pressreleases/PhysicalActivity

Health Canada's Physical Activity Guide
www.phac-aspc.gc.ca/pau-uap/paguide/



Exploring the Connections Between Physical Activity and Cancer



Photo courtesy of Maja Swannie and The University of Calgary

The Tomorrow Project

Co-investigator

Dr. Christine
Friedenreich

Researching the connections between physical activity and cancer is a passion for Dr. Christine Friedenreich, who is a co-investigator with *The Tomorrow Project*. Christine has

a distinguished research career that includes studies examining the role of lifetime physical activity and risk of endometrial cancer, as well as physical activity in breast and prostate cancer survival.

She is also conducting a major intervention trial examining how aerobic exercise might influence different mechanisms that may be related to breast cancer risk in a study called the ALPHA Trial (www.alpha-trial.com).

The Tomorrow Project's Physical Activity Questionnaire, which all participants completed at the time of joining, was developed by Christine for use in large population-based studies. The questionnaire will be a valuable tool for other scientists to use when measuring physical activity as part of their research.

Christine is currently on sabbatical leave at the International Agency for Research on Cancer in Lyon, France. She is collaborating with international scientists on the European Prospective Investigation on Cancer, examining links between physical activity and cancers that have occurred in this European cohort.

She and her family are enjoying the experience of another culture but look forward to returning to Alberta in August, 2005, when Christine will resume her role as a Research Scientist and Leader of Population Health Research with the Alberta Cancer Board.

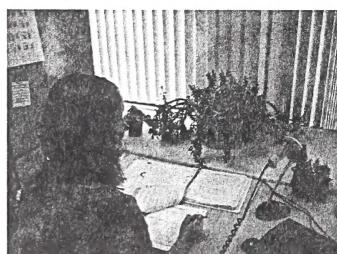
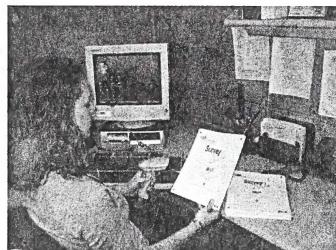
What Happens to the Questionnaires?

Many of you have asked what happens to your questionnaires after they arrive at *The Tomorrow Project* study centre, located in the Tom Baker Cancer Centre in Calgary. We would like to introduce you to some of the staff who ensure that your questionnaire is handled quickly and efficiently.



Linda, our project secretary, receives the mail bins from Canada Post. As many as two hundred packages may arrive on one day.

Melissa helps open each envelope and logs the contents into a database so we know who needs a reminder. Using a bar code scanner helps to make the process accurate and efficient.

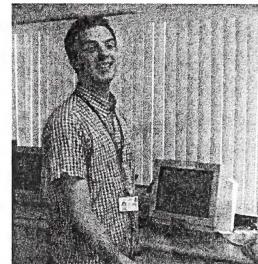


Andrea reads each questionnaire to identify if there is information missing or needing clarification. She also locates new addresses when mail is returned.

Judy is one of the people who may call you to make sure the information you provided is complete and accurate.



Once the questionnaires are complete, they are scanned using a software program that translates the shaded bubbles into data points. Chris is responsible for the smooth operation of scanning and data entry.



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Ensuring Your Privacy

Preserving your privacy is our top priority: we have procedures to follow at every step in the process of gathering data to ensure that all information you give *The Tomorrow Project* remains strictly private.

Once we receive and log your questionnaire, your name and contact details are detached and stored in a different database from the health information you have provided. Names and contact details of people in the study are never released to anyone for any reason without express consent.

We want you to feel confident that the information you provide is secure. If you have any questions or concerns, please let us know: we value your input.

Need To Contact Us?

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